

DOES BOARD CHARACTERISTICS AFFECT THE CAPITAL STRUCTURE* DECISIONS OF GHANAIAN SMES?

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Abstract

The issue of corporate governance has been a growing area of management research especially among large and listed firms. However, less attention has been paid in the area with respect to Small and Medium Enterprises (SMEs). This current study explores the link between corporate board characteristics the capital structure decision of SMEs. The paper specifically assesses how the adoption of corporate governance structures among Ghanaian SMEs influences their financing decisions by examining the relationship between corporate governance characteristics and capital structure using an appropriate regression model. The results show negative association between capital structure and board size. Positive relationships between capital structure and board composition, board skills, and CEO duality are, however, found. The control variables in the model show signs which are consistent with standard capital structure theories. The results generally suggest that SMEs pursue lower debt policy with larger board size. Interestingly, SMEs with higher percentage of outside directors, highly qualified board members and one-tier board system rather employ more debt. It is clear, from the study, that corporate governance structures influence the financing decisions of Ghanaian SMEs.

Keywords: Corporate Governance, Capital structure, Financing, SMEs, Ghana

*This paper was initially presented at the Biennial Conference of the Economic Society of South Africa, Durban, South Africa, from the 7th – 9th September, 2005.

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1. Introduction

Corporate governance is the process and structure used to direct and manage the business affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realizing long-term shareholder value, whilst taking into account the interest of other stakeholders. It is also defined by Keasey *et al* (1997) to include the structures, processes, cultures and systems that engender the successful operation of the organisations. The Cadbury Committee (1992, p. 15) defines corporate governance as the system by which companies are directed and controlled. Corporate governance describes how companies ought to be run, directed and controlled. It is about supervising and holding to account those who direct and control the management. For an SME, it is about the respective roles of the shareholders as owners and the managers (the directors and other officers). The compliance with codes of corporate governance has become the norm for listed firms all over the world. In most countries, SMEs do not strictly comply with such codes but it has often been argued that such codes should also apply to these SMEs. In SMEs, the resources, stewardship and control offered by

directors for instance may be very different from and more direct than in large corporations. The issue of corporate governance has been a growing area of management research especially among large and listed firms. However, less attention has been given to it with respect to SMEs. Previous studies have focused mainly on large companies (see Berger *et al*, 1997; Friend and Lang, 1988; Wen *et al*, 2002; Abor, 2007). The current study seeks to examine the effect of corporate board characteristics on the capital structure of Ghanaian SMEs. The paper specifically assesses how the adoption of corporate governance structures among Ghanaian SMEs influences their financing (capital structure) decisions. The issue is of important considering the significant contributions of SMEs to the Ghanaian economy. Small enterprises have been noted to contribute about 85% of manufacturing employment (Steel and Webster, 1991) and account for about 92% of businesses in Ghana. In many other countries, SMEs make up the majority of businesses and account for the highest proportion of employment. They produce about 25% of OECD exports and 35% of Asia's exports (OECD, 1997). The economic and social contributions of SMEs suggest that it is clearly in the public interest for SMEs to thrive (Fisher and

Reuber, 2000). It is important then for proper management of this sector to ensure enhanced performance. A study of corporate governance issues and the financing decisions of the SME sector is therefore a relevant research area.

The structure of the remainder of the paper is as follows: The second section provides a review of the extant literature. Section three explains the methodology employed for the study. The empirical results are presented and discussed in the fourth section and section five concludes the discussion.

2. Overview of Literature

Corporate governance has usually been associated with larger companies and the existence of the agency problem. Agency problem arises as a result of the relationships between shareholders and managers. It comes about when members of an organisation have conflicts of interest within the firm. This is mainly due to the separation between ownership and control of the firm. It is tempting to believe that corporate governance would not apply to SMEs since the agency problems are less likely to exist. In many instances, SMEs are made up of only the owner who is the sole proprietor and manager (Hart, 1995). Basically, SMEs tend to have a less pronounced separation of ownership and management than larger firms. Some argue that because SMEs have few employees who are mostly relatives of the owner and thus no separation of ownership and control, there is no need for corporate governance in their operations. Also, the question of accountability by SMEs to the public is non-existent since they do not depend on public funds. Most, especially the sole proprietorship businesses do not necessarily need to comply with any disclosure. Because there is no agency problem, profit maximisation, increasing net market value and minimizing cost are the common aims of the members. Members also disregard outcomes of organisational activities that will cause disagreement. They are rewarded directly and as such need no incentives to motivate them. Thus disagreement does not exist and hence no need for corporate governance to resolve them. In spite of these arguments, there is a global concern for the application of corporate governance to SMEs. It is often argued that, similar guidelines that apply to listed companies should also be applicable to SMEs.

Corporate governance has been identified in previous studies (see Berger *et al*, 1997; Friend and Lang, 1988; Wen *et al*, 2002; Abor, 2007) to influence the capital structure decisions of firms (especially large and listed firms). The extant literature identified the main characteristic of corporate governance to include board size, board composition, CEO duality, tenure of the CEO and CEO compensation. However, empirical results on the relationship between corporate governance and

capital structure appear to be varied and inconclusive.

The board of directors is charged with the responsibility of managing the firm and its operation. According to Pfeffer & Salancick (1978) and Lipton & Lorsch (1992), there is a significant relationship between capital structure and board size. Berger *et al* (1997) find that firms with larger board membership have low leverage or debt ratio. They assume that larger board size translates into strong pressure from the corporate board to make managers pursue lower leverage to increase firm performance. However, Jensen (1986) argues that firms with high leverage or debt ratio rather have larger boards. The results of Wen *et al* (2002) and Abor (2007) also show a positive relationship between board size and financial leverage (capital structure). Their findings suggest that large boards, which are more entrenched due to superior monitoring by regulatory bodies, pursue higher leverage to raise company value. Another reason is that larger board membership could result in difficulty in arriving at a consensus in decision-making. These conflicts arising from bigger board size have the tendency of weakening corporate governance resulting in high leverage. Anderson *et al* (2004) also show that the cost of debt is lower for larger boards, presumably because creditors view these firms as having more effective monitors of their financial accounting processes.

The resource dependence approach, developed from Pfeffer (1973) and Pfeffer and Salancick (1978), emphasises that external directors enhance the ability of a firm to protect itself against the external environment, reduce uncertainty, or co-opt resources that increase the firm's ability to raise funds or increase its status and recognition. High proportion of outside directors is believed to be associated with high leverage position. Wen *et al* (2002) find a significantly negative relationship between number of outside directors on the board and leverage. They argue that outside directors tend to monitor managers more actively, causing these managers to adopt lower leverage for getting improved performance results. Also, firms with higher proportion of outside directors tend to pursue low financial leverage with a high market value of equity. On the contrary, Jensen (1986), Berger *et al* (1997) and Abor (2007) argue that firms with higher leverage rather have relatively more outside directors, while firms with low percentage of outside directors experience lower leverage.

CEO duality (i.e. where the CEO is also the chairman of the board) also influences the financing decision of the firm. A two-tier leadership structure is one in which the chair of the board of directors and the CEO position are not held by the same person. The rationale for this was suggested first by Fama and Jensen (1983). Fama and Jensen (1983) define decision management as the right to initiate and implement new proposals for the expenditure of

the firm's resources and decision control as the right to ratify and monitor those proposals. By not allowing an insider to have both decision management and decision control authority over the same proposals, a series of checks and balances are imposed that make it more difficult for managerial insiders to engage in any type of opportunistic behaviour. At the highest levels, this implies that the person with the senior decision management authority (the CEO) should not be allowed to exercise the senior decision control authority as well. Since the board of directors is the highest level decision control structure in the firm, this requires that the board must not be under the control of the CEO. If the board is controlled by the CEO, "this signals the absence of separation of decision management and decision control ..." (Fama and Jensen, 1983). Since the chairman has the greatest influence over the actions of the board, the separation of decision management and decision control is compromised when the chairman of the board is also the CEO of the firm. Thus, requiring the chair and CEO positions to be held by different people (a two-tier leadership structure) should more effectively control the agency problems associated with the separation of ownership and control typical in the modern corporations. According to Fosberg (2004), firms with a two-tier leadership structure should be more likely to employ the optimal amount of debt in their capital structures than firms in which the CEO is also the board chair (a unitary leadership structure or CEO duality). He finds that, firms with a two-tier leadership structure have higher debt/equity ratios. However, the relationship is not statistically significant.

Another corporate governance characteristic affecting capital structure is the tenure of the CEO. This refers to length of years the CEO remains in that position. The daily running of the firm is the responsibility of the CEO and management who are accountable to the board of directors. The decisions of the management, especially the CEO, therefore have an impact on the performance of the firm. Empirical evidence suggests a negative relationship between the tenure of CEO and leverage. Berger *et al* (1997) and Wen *et al* (2002) identify the tenure of the CEO to be negatively related to the leverage. Leverage is lower when the CEO has a long tenure in office. Entrenched CEOs and directors prefer low leverage to reduce performance pressures associated with high debt.

The other related characteristic of corporate governance is compensation of the CEO. CEOs with attractive fixed compensation might pursue lower leverage to reduce the financial risk and keep their job for the attractive remuneration (Stulz, 1988; Harris and Raviv, 1988). However, empirical evidence has shown contradictory findings. Jensen and Meckling (1976), Leland and Pyle (1977) and Berger *et al* (1997) show positive association

between CEO's compensation and capital structure of the firm. Wen *et al* (2002), Friend and Hasbrouck (1988) and Friend and Lang (1988) also find a negative relationship between fixed compensation and financial leverage.

3. Research Methodology

This study explores the interaction between corporate governance structures and capital structure of Ghanaian SMEs based on a sample of 150 SMEs drawn from the Association of Ghana Industries' database of firms and that of the National Board for Small Scale Industries. The selection of sample was based on criteria set by Regional Project on Enterprise Development for SMEs in Ghana. That means firms with employee size of less than 100 were included in the study sample. The data was derived from the financial statements of these firms during a six-year period, 1998 – 2003. Information on board members was obtained through interviews from the management of the firms. The study employs a panel data model used by Wen *et al* (2002) with some modifications. This takes the following form:

$$y_{it} = \alpha X_{it} + \beta S_{it} + \eta_i + \lambda_t + v_{it} \quad (1)$$

where: y_{it} represents debt ratio (total debt/total equity + total debt for firm i in time t), X_{it} is a vector of corporate governance characteristics, S_{it} is a vector of standard capital structure variables, η_i is the individual specific effects, λ_t is the time specific effects and v_{it} is the residual term.

Capital Structure which is the dependent variable is defined as the debt ratio. This is given as total debt divided by total equity plus total debt. The independent variables include Board Size, Board Composition, Board Skill and CEO Duality. These are used as measures of corporate governance. CEO tenure and CEO compensation are excluded from the variables because the firms were not willing to disclose such information. Board size is defined as the number of board members, Board composition is defined as the number of outside directors divided by total number of directors, Board skill is the number of board members with degree or professional qualification and CEO duality is included as a binary variable (=1 if CEO is chairman, otherwise, 0). In addition to the independent variables, the model included certain control variables for the firms' attributes which are also likely to influence the capital structure of SMEs (see Chittenden *et al*, 1996; Jordan *et al*, 1998, Michaelas *et al*, 1999; Esperanza *et al*, 2003; Hall *et al*, 2004). These are Age of the firm, Size of the firm, Profitability and Growth.

4. Discussion of Empirical Results

Table 1 provides a summary of the descriptive statistics of the dependent and independent variables. It shows the average indicators of variables used. The mean (median) debt ratio of the firms is 0.4752 (0.3625). This suggests that total debt appears to constitute less than half of the capital of the SMEs. That is, 47.5% of total assets are financed by debt capital. Board size has a mean (median) of 3.8571 (4.0000). The proportion of outside directors is 49.65%. Average (median) board skills is 2.4338 (2.000). This means, on the average board members with degree or professional qualification is 2. SMEs having their CEO as chair of the board constitute 75.32%. In most Ghanaian SMEs, the owner-manager also acts as chairperson on the board. Firm size, determined as the natural logarithm of total assets has a mean (median) of 21.0908 (21.1461). Profitability, given as the ratio of EBIT to total

assets, registers a mean value of 0.1016 suggesting a return on assets of 10.16%. The mean growth rate is given as 53.10%.

Regression analysis is used to investigate the relationship between measures of corporate governance and leverage. The Ordinary least squares (OLS) panel was found to be the most robust after testing for various options of the panel data regression such as Fixed Effects and Random Effects. The OLS regression results are presented in Table 2. The results from the regression model denote that the independent variables explain the debt ratio determination of the firms at 96.58%. The F-statistics prove the validity of the estimated models. The results indicate that there are statistically significant relationships in the case of board size, board composition, board skill and CEO duality.

Table 1. Descriptive summary statistics

Variable	Mean	Std. Dev.	Minimum	Median	Maximum
Debt ratio	0.4752	0.4957	0.0000	0.3625	0.9585
Board Size	3.8571	1.6179	1.0000	4.0000	10.0000
Board Composition	0.4965	0.2918	0.0000	0.5000	1.0000
Board Skill	2.4338	1.9139	0.0000	2.0000	10.0000
CEO Duality	0.7532	0.4317	0.0000	1.0000	1.0000
Age	11.4520	8.9322	1.0000	8.0000	39.0000
Size	21.0908	1.7886	16.2587	21.1461	26.1586
Profitability	0.1016	0.2478	-0.9566	0.0749	3.3531
Growth	0.5310	1.2224	-0.9979	0.3234	13.8240

Table 2. Model results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	-1.123517	0.059711	-18.81606	0.0000
Board Size	-0.031942	0.004340	-7.359998	0.0000
Board Composition	0.055754	0.021967	2.538126	0.0115
Board Skill	0.056911	0.003154	18.04278	0.0000
CEO Duality	0.119310	0.013587	8.781435	0.0000
Age	0.009900	0.000496	19.94598	0.0000
Size	0.065025	0.002863	22.71452	0.0000
Profitability	-0.566354	0.055673	-10.17289	0.0000
Growth	0.015027	0.008003	1.877698	0.0612
R-squared				0.965767
S.E. of regression				0.411413
F-statistic				1325.944
Prob(F-statistics)				0.000000

The board of directors is charged with the responsibility of managing the firm and its operation. The significantly negative relationship between board size and capital structure suggests that larger boards adopt low debt policy. SMEs with larger boards tend to impress on the owner-manager to employ more equity capital in order to increase firm performance. Managements of such firms are mostly pressurised by the board to open up their ownership by employing external equity. Owner-managers are

often persuaded to adopt lower leverage and rather increase their equity base by increasing the number of shareholders. This result is also consistent with previous studies focusing on large companies (see Berger *et al*, 1997). However, the result contradicts other empirical findings on larger firms (see Jensen, 1986; Wen *et al*, 2002; Abor, 2007).

The Ghanaian companies' code does not stipulate the composition of corporate board membership for firms. There are no requirements to distinguish between executive and non-executive

directors. The appointment of executive and non-executive directors is the prerogative of the firm. The results of this study show positive signs for both board composition and board skill. The significantly positive relationship between board composition (i.e. the ratio non-executive directors to total directors) and debt ratio suggests that SMEs with more non-executive directors on the boards tend to have easier access to credit and therefore pursue high debt policy. This is also confirmed by the significantly positive association between board skill and debt ratio, meaning Ghanaian SMEs with more qualified board members rather employ more debt. This also supports the findings on large firms by Jensen (1986) and Berger *et al* (1997).

The results of this study show a significantly positive association between CEO duality and leverage. This implies that Ghanaian SMEs which have the CEO as the board chairman tend to employ high proportion of debt. The lack of independent leadership makes it difficult for boards to respond to bad decisions by the CEO. It is common to find the owner acting as the CEO and also as the board chairman. In this study, about 75% of the firms have the CEO also acting as the chairman of the board. This is particularly not surprising in the case of SMEs which tend to exhibit control aversion. The result of this study is not different from the findings of Abor (2007) in the case of Ghanaian listed firms. His study pointed out that listed firms in Ghana with the one-tier or unitary board system pursue high debt policy.

The control variables in the model show signs which are consistent with standard capital structure theories. Age of the SME indicates a positive and significant relationship with capital structure, meaning older SMEs in terms of how long they have been in business mostly have good track records and therefore have less problems acquiring debt capital. Firm size shows a statistically significant and positive relationship with capital structure. The results of this study indicate that the bigger the firm, the more debt it employs in its capital structure. One reason is that larger firms are more diversified and hence have lower variance of earnings, making them able to tolerate high debt ratios. Lenders are more willing to lend to larger companies because such firms are perceived to have lower risk levels. On the other hand, smaller firms may find it relatively more costly to resolve information asymmetries with lenders, thus, may present lower debt ratios. As expected, there is a negative relationship between profitability and leverage. The results suggest that higher profits increase the level of internal financing. SMEs that generate more internal funds generally tend to avoid gearing (debt). While profitable SMEs may have better access to debt finance than less profitable ones, the need for debt finance may

possibly be lower for highly profitable SMEs if the retained earnings are sufficient to fund new investments. This seems to support the pecking order theory. The results of this study also show a significantly positive sign for growth. This is suggestive of the fact that growing SMEs require more external financing to finance their growth and therefore display higher leverage.

5. Conclusion and Implications

This paper explores the link between board characteristics and capital structure decisions of Ghanaian SMEs. The corporate governance variables used for this study include board size, board composition, board skill and CEO duality. The empirical results show statistically significant and negative association between capital structure and board size. This study result indicates that Ghanaian SMEs pursue high debt policy with a larger board size. The results of this study also show significantly positive relationships between debt ratio and board composition, board skill, and CEO duality.

The issue of corporate governance has important implications on the financing decisions of Ghanaian SMEs. SMEs with more directors are often able to persuade owner-managers to adopt lower leverage and rather increase their equity base by increasing the number of shareholders or forming partnerships with other equity investors. The existence of non-executive directors could lead to better management decisions and help SMEs in attracting better resources given that external board members may have good knowledge or useful information on financing facilities. The overall average board size is approximately 4 with non-executive directors representing 49.6% of board membership. As expected, the results of this study show that the owner-manager often acts as the chairman of the board. Ghanaian SMEs have the tendency of employing more debt in order to maintain control. Corporate governance can greatly assist the SME sector by infusing better management practices, effective control and accounting systems, stringent monitoring, effective regulatory mechanism and efficient utilisation of firms' resources through external independent directors and subsequently resulting in improved performance. SMEs with well established corporate governance structures are able to gain easier access to credit at lower cost since such firms are able to repay their debt on time. Easier access to credit at lower cost, ultimately leads to improved company performance. The area of corporate governance and capital structure decisions of SMEs however needs further research in order to further develop some of the insights delivered by this study.

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